

Claims

WHAT IS CLAIMED IS:

1. to 15. (canceled)
16. (new) A method for producing rhenium-188 labeled particles, the method comprising the steps of:
 - a) suspending particles of an organic polymer or a biopolymer in a solution wherein the solution contains a water-soluble tin-II salt and a Re-188 perrhenate salt with a radioactivity of 1,000 MBq to 60,000 MBq and wherein the solution has initially a pH value of pH 1 to pH 3;
 - b) heating the solution of step a) to 80 °C to 100 °C,
 - c) after 45 minutes to 70 minutes of heating, increasing and adjusting the pH value to a pH value of pH 5 to pH 8.5.
17. (new) The method according to claim 16, wherein in step c) a solution of citrate, acetate, or tartrate is used for increasing the pH value.
18. (new) The method according to claim 16, wherein in step c) a solution of potassium sodium tartrate is used.
19. (new) The method according to claim 16, wherein the solution of step a) contains a complexing agent for stabilizing the tin-II salt, wherein the complexing agent is selected from 2, 5-dihydroxy benzoic acid acetic acid, citric acid, malonic acid, gluconic acid, lactic acid, hydroxy isobutyric acid, ascorbic acid, tartaric acid, succinic acid, salts of said acids, or glucoheptonate.
20. (new) The method according to claim 16, wherein the solution of step a) contains 2,5-dihydroxy benzoic acid as a complexing agent for stabilizing the tin-II salt.
21. (new) The method according to claim 16, wherein the particles have a diameter of 10 µm to 30 µm.
22. (new) The method according to claim 16, wherein initially the water-soluble tin-II salt is present in the solution of step a) in a concentration of 10 mmol/l to 50 mmol/l.
23. (new) The method according to claim 16, wherein the particles are comprised of human serum albumin.
24. (new) A pharmaceutical kit for producing particles labeled with Re-188, the kit comprising:

- a) a first container containing a quantity of water soluble tin-II salt and a quantity of a complexing agent for stabilizing the tin-II salt, the complexing agent selected from 2, 5-dihydroxy benzoic acid, acetic acid, citric acid, malonic acid, gluconic acid, lactic acid, hydroxy isobutyric acid, ascorbic acid, tartaric acid, succinic acid, salts of said acids, or glucoheptonate;
- b) a second container with particles made from an organic polymer or a biopolymer;
- c) a third container containing a quantity of a substance for increasing the pH value, the substance selected from citrate, acetate, or tartrate, present in solid form or in aqueous solution and generating in solution a pH value of pH 6.5 to pH 8.5.

25. (new) The pharmaceutical kit according to claim 24, wherein the complexing agent for stabilizing the tin-II salt is 2,5-dihydroxy benzoic acid.

26. (new) The pharmaceutical kit according to claim 24, wherein the substance for increasing the pH value is potassium sodium tartrate.

27. (new) The pharmaceutical kit according to claim 24, wherein the particles have a diameter of 10 μm to 30 μm .

28. (new) The pharmaceutical kit according to claim 24, wherein the kit contains 0.02 mmol to 0.1 mmol of the tin-II salt per administration to the patient.

29. (new) The pharmaceutical kit according to claim 24, wherein the particles are comprised of human serum albumin.

30. (new) Rhenium-188 labeled particles produced by the method according to claim 16.

31. (new) Rhenium-188 labeled particles according to claim 30 as a radiotherapeutic agent for treating tumors, carcinoma or their metastases.